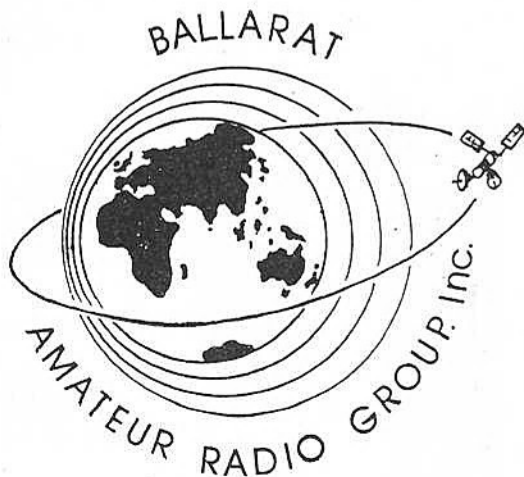


93/04 01

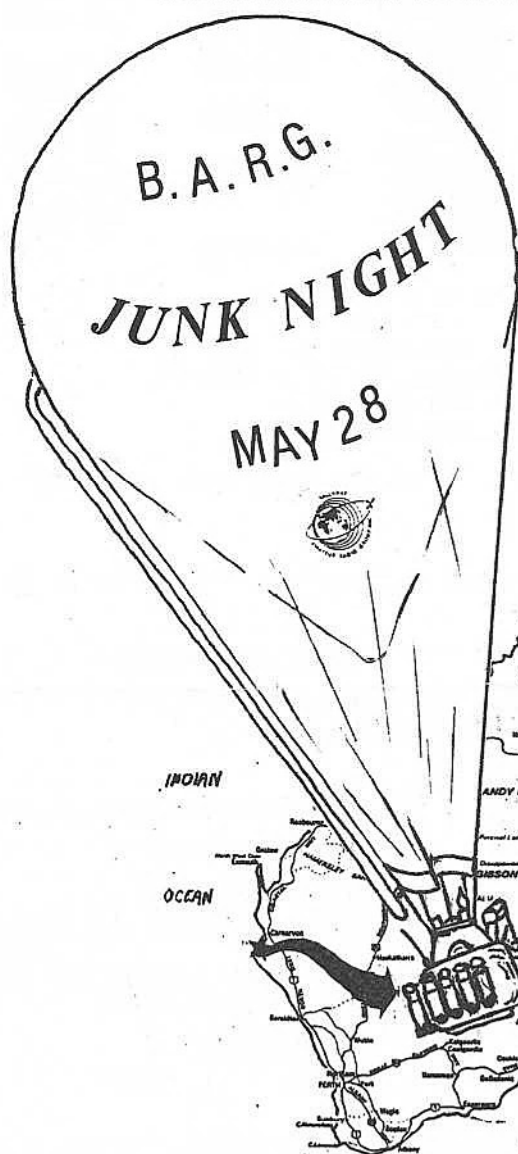
— — — APRIL 1993 — — —



B.A.R.G. NEWS.

REGISTERED BY AUSTRALIA POST, PUBLICATION No. VBH3397

© Monthly Newsletter of the
Ballarat Amateur Radio Group



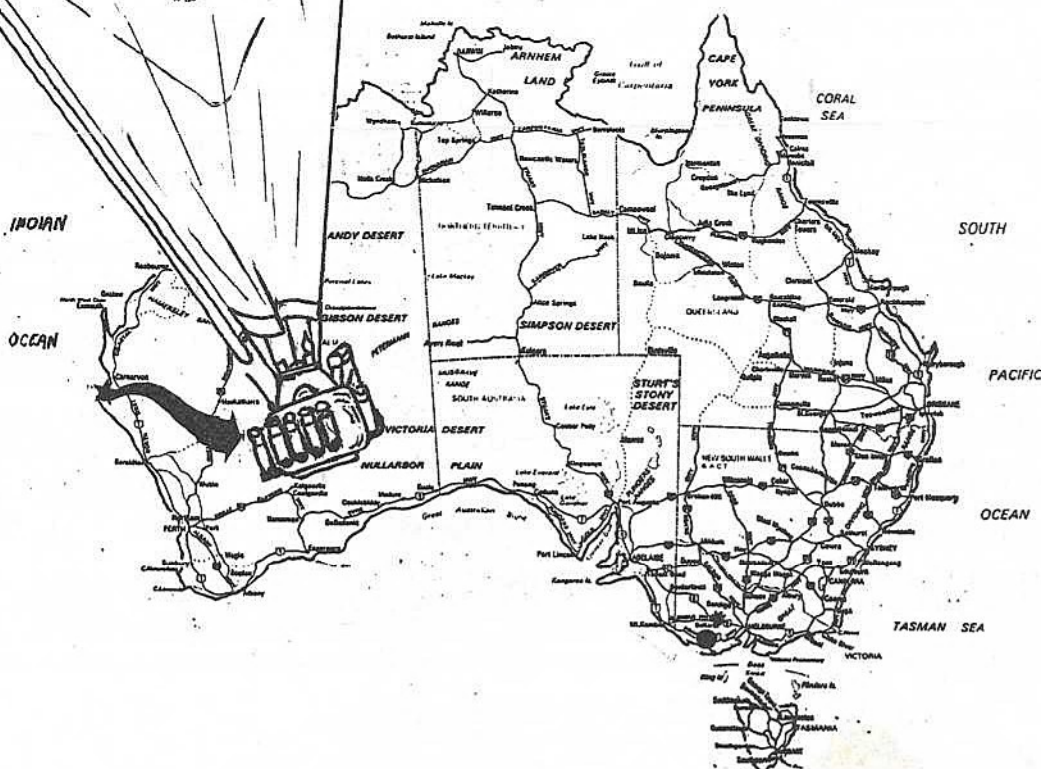
— COMING UP —

DICK SMITH (VK3DIK)

TRANSCONTINENTAL CROSSING
BY BALLOON

SCHEDULED FOR END MAY/EARLY JUNE

MORE INFO NEXT MONTH.



93/04 02



BALLARAT AMATEUR RADIO GROUP INC. EXECUTIVE COMMITTEE 1992/93

			HOME	WORK
PRESIDENT	Ian Robinson	VK3FD	358031	379175
IMM. PAST PRESIDENT	Tom George	VK3DMK	355662	327234
VICE PRESIDENT	Cliff Bilston	VK3CCB	361249	330322
SECRETARY	Jim Wright	VK3CFB	327563	
TREASURER	Harry Hekkema	VK3KGL	357563	
ASST. SECRETARY	George Fowler	VK3DOK	326863	391954
PUBLICITY OFFICER	Norm D'Angri	VK3LBA	341613	
EDUCATION OFFICER	Tom George	VK3DMK	355662	327234
NET CO-ORDINATOR	John Hazledine	VK3CFH	391971	391035
TECHNICAL OFFICER	Merv Hooley	VK3KAW		311317
MEMBERS' REPS.	Mary Curnow	VK3FMC	301927	
	Reg Carter	VK3CAZ	417585	
	Charlie Stewart	VK3DCS	317425	

OFFICERS AND COMMITTEES

QSL MANAGER	Jeff Pigdon	VK3PAP	327041	311211
AWARDS MANAGER	Maurie Batt	VK3XEX	422245	
PROPERTY OFFICER	Jeff Pigdon	VK3PAP	327041	311211
HAMFEST CONVENER	Tom George	VK3DMK	355662	327234
WICEN COMMITTEE	Gordon Cornell	VK3FGC	392427	391135
	Geoff Smith	VK3ADB	332112	
	Tom George	VK3DMK	355662	327234
TECHNICAL COMMITTEE	Ian McDonald	VK3AXH		311317
	Dick Forrester	VK3VU	357663	391001
	Merv Hooley	VK3KAW		311317
	Dick Antoziewicz	VK3AEX	323273	311818
	David McConnell	VK3YNB		
	Ben Orchard	VK3TOP		377836
NEWSLETTER EDITOR	Norm D'Angri	VK3LBA	341613	

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

REPEATERS: VK3RBA - 146.750 MHz. Voice. Mt. Buninyong. (Ch. 3)
 VK3RBS - 146.900 MHz. Voice. Smeaton Hill. (Ch. 6)
 VK3RPC - 144.750 MHz. Packet Mt. Warrenheip
 VK3RBU - 438.475 MHz. Voice. Mt. Hollowback

CLUB NET: Thursday nights at 8 pm. (8.30 pm. during daylight saving)
 Freq. - 3.610 MHz. +/- QRM.

FOX HUNTS: Monday nights at 7.30 pm.
 Freq. - 146.500 MHz. Meet at Education Centre - Hopetoun St.

2 METRE SCRAMBLE: Sunday nights at 7.50 pm.
 Freq. - 146.425 MHz. to 146.600 MHz. Call back on VK3RBA.

MEETINGS: Last Friday of every month at 7.30 pm. at
 Ballarat Community Education Centre
 Hopetoun St. Ballarat.

CLUB CORRESPONDENCE TO:

The Secretary
 B. A. R. G. Inc.
 P. O. BOX 1261
 MAIL CENTRE BALLARAT
 3354

NEWSLETTER ARTICLES TO:

29 Lawrence St.
 Alfredton
 Ballarat
 Vic. 3350

LIFE MEMBERS

MAURIE BATT	VK3XEX
KEVIN HUGHES	VK3WN
IAN McDONALD	VK3AXH
PHIL SEDDON	VK3AQM
GEORGE SMALL	VK3DKJ (DEC)
STAN WIDGERY	VK3SE

DISCLAIMER : Whilst every care is taken in the preparation and reporting of events and articles in this newsletter, the Ballarat Amateur Radio Group Inc. its officers and members do not accept any liability for any disputed article or comment. Views expressed in this newsletter are not necessarily those of the Editor or the Committee of B.A.R.G. Inc.. Projects are presented in good faith and are assumed to have been validated by the contributor. Reproduction of articles for use in other Radio Club magazines is permissible providing acknowledgement of the source is given.



MEETING OPENED by President Ian VK3FD at 7.35pm. Ian welcomed the 32 members present and the Officers of WICEN attending to photograph Club WICEN members for their identification badges.

APOLOGIES VK3 FRO, XEX, YMW, KAW, KIT, LDC, FMC, PDG, CUH, ADA, NIZ, SE, DS, Wendy.

MINUTES of previous meeting as circulated were confirmed. LBA/FD.

CORRESPONDENCE IN Robin ENX Thanks for an enjoyable night at BARG.

CORRESPONDENCE OUT Begonia Festival Committee donation of \$100.00
Robin ENX Thanks for being our guest speaker.

TREASURERS REPORT General a/c \$73.33. St George Bank \$4234.83.
Accounts passed for payment \$323.30. KGL/DMK

CLUB NET Net will start at 8.00pm until further notice.

EDUCATION Novice classes proceeding. Anyone wishing to sit the next exam should contact Tom DMK by next meeting.

TECHNICAL Spare transceiver for RBA nearly completed and will be installed in the near future.

PUBLICITY Norm LBA requires material for newsletter. Suggestions are needed on getting the newsletter printed, we have a problem!

QSL BUREAU No cards received but understand that there will be some available at next meeting.

WICEN All members were issued with identity cards and Gordon FGC will be holding an antenna testing shortly.

GENERAL BUSINESS

Ben TOP gave a report on the progress of the ATV repeater.
Ian FD has received complaints about Club Business being conducted at Natter Nights. The Natter night is not a meeting night of the Club and no minutes are taken.
The May meeting will be usual Auction night for unwanted and preloved equipment and junk.

MEETING CLOSED at 8.50pm after a talk on WICEN by Superintendent Lindsay Forrest of Victoria Police. Ian FD thanked him for his talk.

73 Jim CFB.

DATE UPDATES

N.A.S.A. SHUTTLE LAUNCHES: April 6th. April 23rd. May 18th.

MOORABBIN & DISTRICT R.C. HAMFEST: May 1st.

SUNRAYSIA & RIVERLAND R.GRPS. MILDURA CONVENTION: May 15th.

AUSTRALIAN GEOGRAPHIC (DICK SMITH) BALLOON FLIGHT: From May 24th

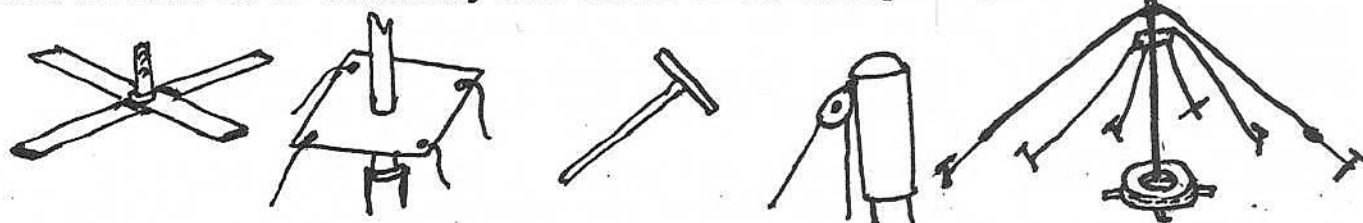
Weather permitting, the scheduled lift off is most likely to be on or about the 31st. May. Information is available after May 24 through the control centre on 0055 29060 (25c buys 42.9 secs.)

93/04 04



ONE SOLUTION TO A WICEN 80M. EMERGENCY ANTENNA

1. Take two pieces of scrap steel about 600mm. long and weld them into a cross with a 12mm. X 80 or 100mm. long bolt welded to the crosspoint (see sketch).



Put the cross onto the ground and drop your spare wheel over it to hold it down.

2. Obtain a short piece (about 200mm. long) of 27mm. water pipe and drop this over the centre bolt. This centre stub will now accept the bottom section of one of the 5 section Telecom Clearance Guides that are available.

3. A square piece of steel plate is required with a small hole in each corner and a hole in the centre which is big enough to just slip over the small pole but small enough to sit on the ferrule of the lower pole.

Four poly ropes should now be attached to the corner holes to act as guys. These guys should be brought down to "T" shaped pegs about 20cms. long with 10cm. wide heads. (I cut mine from scrap reo' mesh).

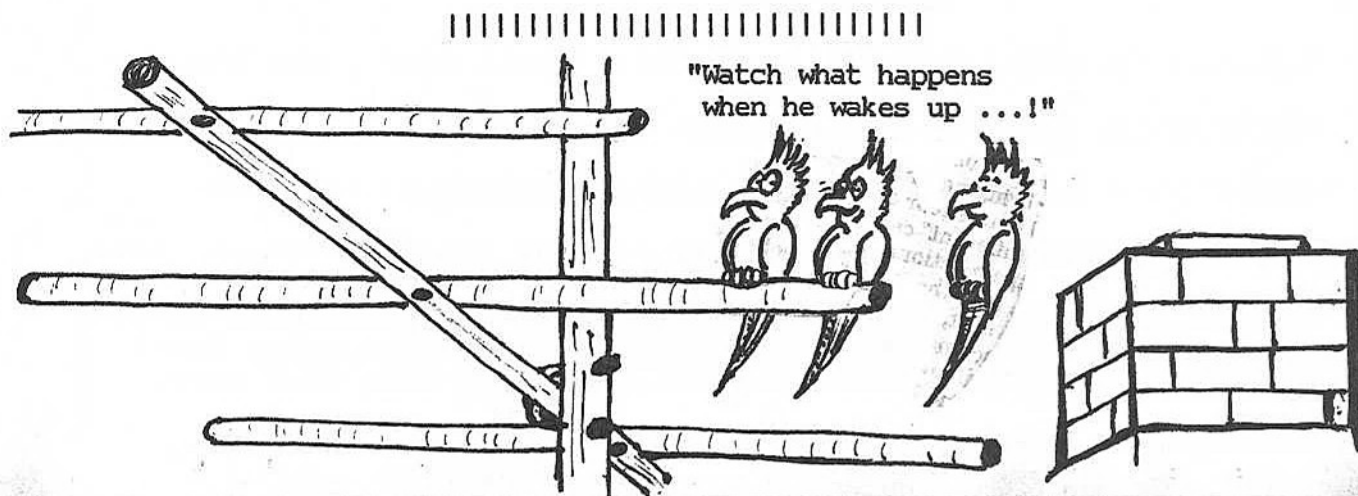
4. Obtain a short length of tubing (with one closed end) and of sufficient diameter to slip over the top section of the mast. To the closed end of this tube attach an 'awning pulley' (from McEwans) and thread another piece of poly rope through it. Slide this assembly over the top of the mast and raise the other sections to their required height.

5. Tie off the guys so that the mast is supported vertically, and the pulley can then be used to raise the centre point of an "inverted vee" to the top of the mast. Two "T" pegs are used to anchor the extended legs of the "vee". I fitted an S0239 to the centre of the antenna so that a 10m. length of RG58 can be used for the R.F. feeder.

I find that I can erect this antenna in under 10 minutes, and as I also carry antennas for 40m. and 10m. I can easily change the active elements by dropping the centre.

If you do not require an 80m. antenna the mast can be used to support a lightweight 2m. antenna at 20 feet, which is a useful height.

73 Reg VK3CAZ.



93/04 05



TO RUN 3 PHASE MOTORS ON SINGLE PHASE SUPPLY

Kelly (VK3MKH) submits the following article, originally published in a U.K. magazine by Chris Crew of Grimsby. Chris had need to adapt a 3/4 HP. 3 phase motor to run on single phase and his experimentation led to the following circuit, which he and his colleagues have used very successfully.

<<<< >>>>

In the past I have been deterred from purchasing ex-industrial or school machinery because the machines are equipped with 3 phase motors. This would clearly entail the expense of re-equipping with a single phase motor or using a phase inverter.

After making investigations and tests I have found that it is perfectly feasible and relatively inexpensive to successfully run these motors on single phase using the circuitry shown below.

Capacitor values vary with motor horsepower as shown in table. The 'start' capacitor values shown will permit starting against moderate loads. For starting against heavier loads the value of these capacitors will need to be doubled or even trebled.

UNDER NO CIRCUMSTANCES ALTER THE VALUE OF THE 'RUN' CAPACITOR as this will achieve nothing extra and cause overheating of the motor windings. The motor will achieve 85% of its rated power when up to speed.

Motors must be arranged in Delta configuration. This is easily accomplished on most modern motors as the coil ends are brought out to terminals and only straps have to be changed.

In the circuit RLB is part of the overload/starter unit. If this marked as 415 volt and will not hold on 240 volt it is a simple matter to remove some of the coil windings until it is satisfactory.

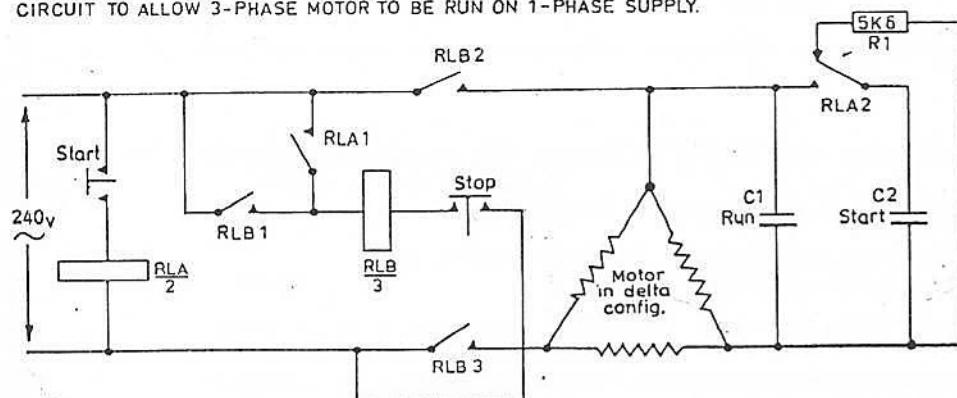
RLA can be any mains voltage relay.

The 'run' capacitor must be continuously rated and marked 350 volt or better. The 'start' capacitor is not so critical BUT UNDER NO CIRCUMSTANCES ATTEMPT TO USE ELECTROLYTIC CAPACITORS FOR EITHER APPLICATION.

Operation is as follows:

When 'start' button is pressed & held for approx 1 sec. relay 'A' (RLA) operates. Contact RLA1 operates relay 'B' (RLB) disconnects discharge resistor R1 & connects start capacitor in circuit. Relay 'B' (RLB) is held operated by contact RLB1 via 'stop' button. Contacts RLB2 & RLB3 connect supply to motor which runs up to speed in approx 1 sec. After 1 sec. 'start' button is released, releasing relay 'A'. Contact RLA2 disconnects start capacitor C2 which discharges via R1. Contact RLA2 has no effect. When 'stop' button is pressed relay 'B' releases. Contact RLB2 disconnects hold circuit. Contacts RLB2 & RLB3 disconnect mains supply from motor. Run capacitor C1 discharges via motor winding.

CIRCUIT TO ALLOW 3-PHASE MOTOR TO BE RUN ON 1-PHASE SUPPLY.



MOTOR H.P.	RATING KW.	CAPACITOR	
		RUN	START
0.25	0.18	10µf	20µf
0.33	0.25	13µf	25µf
0.50	0.37	20µf	40µf
0.75	0.55	30µf	60µf
1.00	0.75	40µf	80µf
1.50	1.21	60µf	120µf
2.00	1.50	80µf	160µf

CLUB NET - ALTERATION TO START TIME

PLEASE NOTE THAT THE STARTING TIME FOR THE CLUB NET HAS REVERTED BACK TO 8.00PM. ON THURSDAY NIGHTS WITH THE CESSATION OF DAYLIGHT SAVING. THIS START TIME WILL APPLY UNTIL FURTHER NOTICE.

93/04 06



B. A. R. G. CALLSIGNS

The following is a list of callsigns held by B. A. R. G. members as at the 28th. March. 1993.

You may find it of some benefit to remove this page and pin it to the shack wall for reference. Could you please notify any errors or alterations.

A	VK3 AAI - Murray	F	VK3 FD - Ian		VK3 PUD - John
	VK3 AAP - Bud		VK3 FGC - Gordon		VK3 PUI - Ian
	VK3 ABI - Gordon		VK3 FIO - Ian	S	VK3 SE - Stan
	VK3 ABK - Dick		VK3 FMC - Mary	T	VK3 TDG - Dennis
	VK3 ACC - Roger		VK3 FR - Peter		VK3 TOP - Ben
	VK3 ACL - ?		VK3 FRO - Eric		VK3 TU - Bert
	VK3 ADB - Geoff	I	VK3 IBM - Ken	V	VK3 VAG - Jim
	VK3 ADG - Woody	J	VK3 JFL - Richard		VK3 VBA - Doug
	VK3 ADX - Merv		VK3 JON - ?		VK3 VEJ - Charlie
	VK3 AEX - Dick	K	VK3 KAV - Ken		VK3 VU - Dick
	VK3 AKS - Peter		VK3 KAW - Merv	W	VK3 WN - Kevin
	VK3 AMC - David		VK3 KAY - Doug	X	VK3 XAH - Adrian
	VK3 ANH - Jim		VK3 KG - Kevin		VK3 XDQ - Daryl
	VK3 AQM - Phil		VK3 KGL - Harry		VK3 XEX - Maurie
	VK3 ASU - Des		VK3 KHN - Robert	Y	VK3 YJM - Jeff
	VK3 ATA - Ken		VK3 KIT - Leon		VK3 YMW - Max
	VK3 AXH - Ian		VK3 KJH - Jim		VK3 YNB - David
B	VK3 BNC - Bob		VK3 KL - Laurie	Z	VK3 ZCO - John
	VK3 BQC - Ian		VK3 KQB - Brian		VK3 ZHH - Ron
	VK3 BSL - Bill		VK3 KQF - Fred		
C	VK3 CAZ - Reg		VK3 KQQ - Neil	4	VK2 CLM - Leo
	VK3 CCB - Cliff		VK3 KY - Ivor	4	VK4 CMC - Clarrie
	VK3 CFB - Jim		VK3 LBA - Norm		
	VK3 CFD - Ian	L	VK3 LDB - Daniel		
	VK3 CFF - Frank		VK3 LDC - Dick		
	VK3 CFH - John		VK3 LU - Jeff		
	VK3 CFI - Maggie	M	VK3 MCW - Craig		
	VK3 CIS - Ian		VK3 MGR - Danny		
	VK3 CJB - John		VK3 MID - Bob		
	VK3 CJH - John		VK3 MIJ - David		
	VK3 CRD - Reg		VK3 MKH - Kelly		
	VK3 CUH - Neville		VK3 MLH - Mike		
	VK3 CYD - Clem	N	VK3 NAS - Alan		
D	VK3 DAL - Peter		VK3 NBM - Barry		
	VK3 DCS - Charlie		VK3 NDI - David		
	VK3 DET - Ernie		VK3 NIZ - Ted		
	VK3 DFI - Lou		VK3 NLY - Laurie		
	VK3 DIE - Greg		VK3 NTA - Trevor		
	VK3 DLO - Laurie		VK3 NWN - Keith		
	VK3 DMK - Tom		VK3 NYD - Les		
	VK3 DOK - George	P	VK3 PAP - Jeff		
	VK3 DS - George		VK3 PDA - Ken		
E	VK3 EF - Ian		VK3 PDB - Debbie		
	VK3 EHP - Damien		VK3 PH - Bill		
	VK3 ESM - Steven		VK3 PRJ - Ron		

B. A. R. G. AWARDS:

D. X. WIDOW'S AWARD: Acknowledge the XYL's patience. (No contacts needed)
Supply name. \$2.00

GOLDRUSH AWARD: Contact 10 B. A. R. G. members. \$3.00

WESTERN DISTRICT AWARD: Contact 10 Western District stations
(includes Ballarat) \$2.00

AWARDS MANAGER: Maurie Batt VK3XEX - RSD Rokewood Junction. - Vic. 3351

Club Net: 3.610 MHz. Thursday Nights 8 pm. (8.30 pm Daylight Saving)
Club Scramble: Sunday Nights 7.50 pm to 7.55 pm.
145.425 MHz to 146.600 MHz. Call back on VK3RBA
Fox Hunting: Monday Nights at 7.30 pm. Meet at Education Centre.

COMING EVENTS

April:

9th. Good Friday

16th: Natter Night

* Exams

30th: BARG Meeting

May:

14th: Natter Night

28th: BARG Meeting
(Junk Auction)

June:

* Dick Smith Balloon
flight across Aust.
* Novice Contest

11th: Natter Night

12th-14th.
Queen's Birthday
Mallee Rally

25th: BARG Meeting

July:

9th. Natter Night

30th: BARG ANNUAL G. M.

August:

* 14th: R. D. Contest
* 15th: R. D. Contest

27th: BARG Meeting

* Dates not confirmed.

DON'T FORGET

** APRIL NATTER NIGHT - 16TH. APRIL

** APRIL MEETING - 30TH. APRIL

** MAY MEETING (28th. May)
IS THE ANNUAL
CLUB JUNK AUCTION NIGHT

TRUE WISDOM IS
FOUND ON "T" SHIRTS.

NOTICE BOARD

93/04 07



XTALS

WANTING XTALS FOR YOUR 828 ?
CHANNEL 144.750 MHz.

CONTACT MERV (VK3KAW)

WANTED BY ARTHUR (VK3ENT)
ONE MORSE KEY

CONTACT BOB (VK3ENC)

FOR SALE

DANIEL (VK3LDB) HAS FOR SALE A
TS 520S WITH NEW SPARE FINALS
ONLY \$400.00

P.O. Box 447 Buninyong 3357

IF YOU LOOK LIKE
YOUR W.I.C.E.N PHOTO
YOU AREN'T WELL
ENOUGH TO DRIVE.
SEE THE DOCTOR.

FOR SALE

2 ONLY REAR BUMPER ANTENNA MOUNTS
(CHROME PLATED)
TO SUIT KINGSWOOD HQ AND LATER MODELS
\$20.00 CONTACT BARRY - (VK3NEM)

EXAMINATIONS

Another series of examinations
will be held in late April on
a date yet to be confirmed.
Check with Tom (VK3DMK) for
date and details.



PHOTOCOPIERS
ARE
HOPELESS
THEY CAN'T DO
ANYTHING
ORIGINAL

FOR SALE

KENWOOD XCVR. TS-830S, SP-230, ATU-230
VFO-230. \$1800

YAESU XCVR. FT-107, ATU-FC-107,
PHONE PATCH SP-107P \$1470

YAESU XCVR. FT-102, VFO-102DM,
ATU-FC-102,
PHONE PATCH SP-102P \$1760

REALISTIC HTX-100X XCVR. - 10 METRE.
\$250

HOME SECURITY SYSTEM.
CONTROL 4. WITH BACK-UP BATTERY AND
POWER PACK. ENTRYGUARD-SECURITY CODED
KEY PAD. \$245

ALL EQUIPMENT IN MINT CONDITION
PHONE ALAN (VK3NAS) 053-355600

93/04 08



CAUTION

In the middle of the Pacific Ocean there is a line you can cross and lose a whole day.

In the middle of our highways there are other lines you can cross and do even better.

EMERGENCY FIELD STRENGTH METER

If you need an emergency field strength meter, try plugging a short 'rod' aerial into the TX input socket of your SWR meter. With the switch in the Forward position it is a lot better than you may think. REG - VK3CAZ

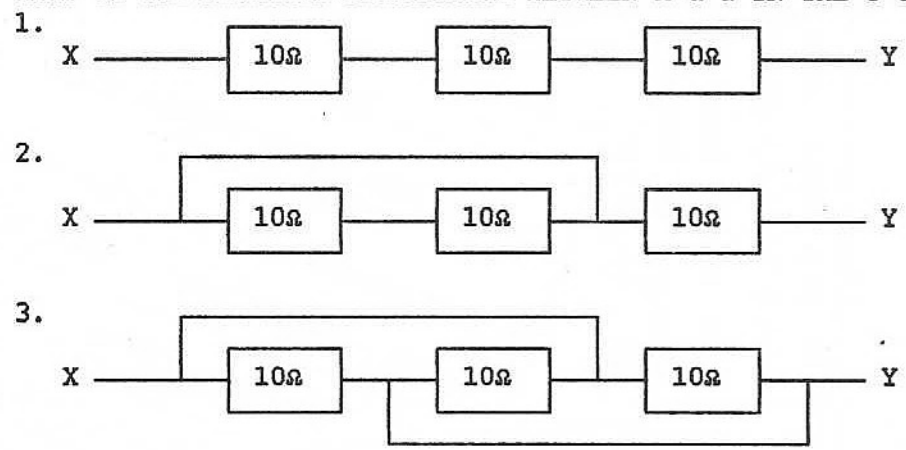
*** ELECTRONIC LOVE ***

If she wants a date METER
 if she comes to call RECEIVER
 If she wants an escort CONDUCTOR
 If she's cheating DETECTOR
 If she's fat CONDENSER
 If she's thin FEEDER
 If she's extravagant LIMITER
 If she's in error RECTIFIER
 If she's cold HEATER
 If she's ugly TRANSFORMER
 If she's bossy RESISTOR
 If she's bored EXCITER
 If she refuses REJECTOR

(Thanks to the I.A.R.S. Propagator)

NOT A PROBLEM ???

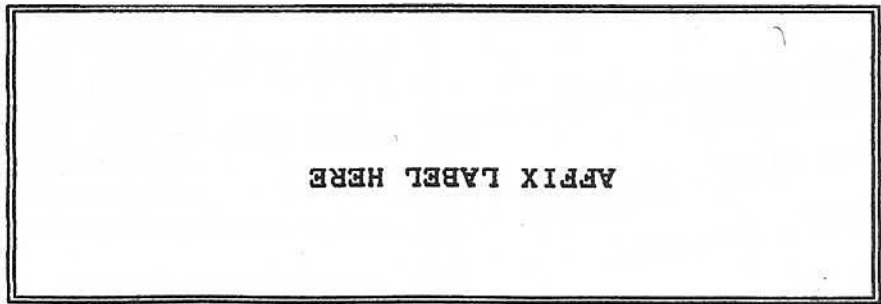
WHAT IS THE MEASURED RESISTANCE BETWEEN X & Y IN THE 3 CONFIGURATIONS



REG VK3CAZ - ANSWERS NEXT MONTH.

MONTHLY NEWSLETTER OF THE BALLARAT AMATEUR RADIO GROUP INC.

B. A. R. G. NEWS



SURFACE MAIL

POST PAID
 BALLARAT
 VIC. AUST
 3350

REGISTERED BY AUSTRALIAN POST
 PUBLICATION NO. VBH3397
 IF UNDELIVERABLE RETURN TO:
 P.O. BOX 1261
 MAIL CENTRE
 BALLARAT
 3354